

## Airline Operations

Code: 101769  
ECTS Credits: 6

**2025/2026**

Degree	Type	Year
Aeronautical Management	OB	3

### Contact

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### Teaching groups languages

You can view this information at the [end](#) of this document.

### Prerequisites

None

### Objectives and Contextualisation

The course aims to introduce students to airline operations by addressing the following key aspects:

- Analyse the airline as a business, understanding its structure and functioning, and managing the financial and human resources necessary for efficient operations.
- Raise awareness about the importance of quality and safety in the aviation sector, highlighting the fundamental role played by the human factor.
- Understand the processes related to passenger boarding and aircraft cargo loading, as well as the associated procedures.
- Introduce basic concepts of aircraft flight and the influence of meteorological factors on operations.
- Establish the foundations for understanding the internal organization of an airline company in response to the operational, human, and technical challenges faced by the industry.

### Competences

- Communication.
- Identify, develop and maintain the necessary resources to meet the tactical and operative needs inherent to air transport activities.
- Personal attitude.
- Personal work habits.
- Supervise the management of resources in an airport.
- Thinking skills.

- Use knowledge of the fundamental principles of mathematics, economics, information technologies and psychology of organisations and work to understand, develop and evaluate the management processes of the different systems in the aeronautical sector.

## Learning Outcomes

1. Assess alternatives in the case of self-handling.
2. Communicate knowledge and findings efficiently, both orally and in writing, both in professional situations and with a non-expert audience.
3. Critically assess the work done.
4. Describe the general aspects of JAR/EASA rules.
5. Describe the operations to be coordinated in aircraft turnaround time.
6. Develop critical thought and reasoning.
7. Develop curiosity and creativity.
8. Develop independent learning strategies.
9. Develop the ability to analyse, synthesise and plan ahead.
10. Draw up and interpret passenger service procedures.
11. Identify the human resources (cabin crew) for the daily operations of aircraft.
12. Identify the maintenance operations to be performed on aircraft, and their impact on quality of service.
13. Identify the resources and procedures necessary to ensure flight safety.
14. Identify types of airlines and services that they offer.
15. Maintain a proactive and dynamic attitude towards career progression, personal growth and continuous professional development. Have the will to succeed.
16. Make efficient use of ICT in communicating ideas and results.
17. Manage time and available resources. Work in an organised manner.
18. Plan and control operations.
19. Plan the activities that make up the turnaround cycle in airline operations.
20. Understand the basic principles of general meteorology and climatology.
21. Use English as the primary language of professional communication.
22. Work independently.

## Content

### 1. Introduction to Airlines

- Overview of the airline industry and types of airlines
- Basic business concepts in airlines

### 2. Airline Organization and Operations

- Structure and main departments of an airline
- Basic operational processes (handling, maintenance)
- Importance of safety and quality

### 3. Passenger and Cargo Handling

- Overview of passenger boarding and cargo loading
- Customer service basics

#### 4. Basics of Aircraft and Flight

- Introduction to aircraft and how they fly
- Basic aerodynamics and performance
- Weather factors affecting flights

#### 5. Industry Challenges and Trends

- Key challenges facing airlines
- Introduction to innovation and sustainability in aviation

The lecturer may adapt the content and dynamics of the course according to the characteristics and assimilation level of the group. This level of assimilation will increase in proportion to the students' autonomous work and their advance and weekly preparation of practical activities, which include readings in English and questions for critical reflection.

### Activities and Methodology

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
Presentations	14	0.56	3, 20, 2, 4, 5, 7, 6, 16, 12, 14, 15, 18, 21
Theory classes	30	1.2	1, 20, 10, 4, 5, 11, 13, 12, 14, 18, 19
Type: Supervised			
Seminars	15	0.6	1, 20, 10, 4, 5, 11, 13, 12, 14, 18, 19
Type: Autonomous			
Assignment (Group)	24.55	0.98	3, 2, 7, 16, 17, 21
Study	42	1.68	8, 9, 6, 17, 22

### Theoretical Classes

The theoretical classes will begin with the presentation of basic and descriptive concepts, which will serve as a fundamental foundation for the progressive understanding of the content. As the sessions progress, these concepts will be further developed to enable students to analyse and understand airline management theory from a critical perspective, while also considering its real-world application in the industry.

### Practical Sessions

Students will be required to independently prepare exercises, weekly readings, case studies, and other materials related to the theory covered each week. This prior preparation is essential to make the most of in-person sessions, where active participation will be encouraged, and critical thinking will be developed through problem-solving and discussion.

Annotation: Within the schedule set by the centre or degree programme, 15 minutes of one class will be reserved for students to evaluate their lecturers and their courses or modules through questionnaires.

## Assessment

### Continuous Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
Assignment	20%	20	0.8	3, 2, 8, 9, 7, 6, 16, 17, 15, 18, 22, 21
Exam	50%	2.45	0.1	1, 3, 20, 2, 10, 5, 9, 6, 17, 11, 13, 12, 18, 19, 22
Midterm	30%	2	0.08	1, 3, 20, 2, 10, 4, 5, 9, 6, 13, 12, 14, 19, 21

This course does not include a single evaluation system.

#### NON-EVALUABLE STUDENTS

A student will be considered non-evaluable (NE) if they do not attend any component of the continuous assessment (i.e., the midterm exam and the assignment). Non-evaluable students WILL NOT be allowed to take the resit exam.

#### OVERALL COURSE ASSESSMENT:

It will be the weighted average according to the established weights:

$0.3 (\text{Midterm}) + 0.5 (\text{Final Exam}) + 0.2 * (\text{Assignment})$ .

The continuous assessment components must be met by the deadline.

Late submissions will receive a mark of zero.

To pass the course, the overall grade must be at least 5 out of 10 on the final exam or the resit exam.

1 ECTS = 25 hours of student work.

#### Resit

To be entitled to resit, students must have previously been assessed in a set of activities representing at least two-thirds of the total course grade. Section 3 of Article 112 ter. Recovery (UAB Academic Regulations).

The average grade for the course must be between 3.5 and 4.9.

Students who attend and pass the resit will pass the course with a grade of 5. Otherwise, they will retain their original grade.

The date of this exam will be scheduled in the Faculty's exam calendar.

#### Irregularities in Assessment Activities

Without prejudice to other disciplinary measures that may be deemed appropriate, and according to current academic regulations, "if a student commits any irregularity that may lead to a significant variation in the grade of an assessment activity, that activity will be graded as zero, regardless of any disciplinary process that may be initiated. This means plagiarism, cheating, allowing others to copy, etc. are prohibited. If multiple

irregularities occur in the assessments of the same course, the final grade for that course will be zero." Section 10 of Article 116. Assessment results. (UAB Academic Regulations).

The use of artificial intelligence as a substitute for individual or group effort by students is prohibited. Under no circumstances may it be used to generate content for assignments, reports, or any task.

The use of AI as a search tool is permitted, but it is the responsibility of students to verify and cross-check the information provided by such tools. Additionally, it must be referenced specifying which tool was used and for what purpose (what was searched).

The use of academic and scientific references is mandatory in any document. Any content, whether partial or total, paragraph or sentence, that is not referenced and is not the result of original work, will be considered plagiarism, which constitutes an offence and, therefore, will result in a grade of zero and may lead to disciplinary proceedings.

## ASSESSMENT OF REPEATING STUDENTS

Repeating students will not receive differentiated treatment and must complete all proposed activities and assessments to pass the course.

## DISTINCTION

Awarding a distinction is at the discretion of the faculty responsible for the course. UAB regulations indicate that distinction can only be awarded to students who achieve a final grade of 9.00 or higher. Up to 5% of the total enrolled students may receive a distinction.

Partial or total distribution of teaching and learning materials is prohibited (EU Regulation 2016/679 of April 27, 2016, General Data Protection Regulation, GDPR).

Intellectual Property Law Legislative Decree 1/1996 of April 12 (TRLPI).

## Bibliography

The bibliography will consist of various materials, particularly current publications, regulatory manuals, manuals of interest, and websites such as, but not limited to:

- AIR OPS (EASA)
- How to implement an AS9100 (ETI GROUP)
- Pilot's Handbook (FAA)

AVIATION MAGAZINE: <http://www.skybrary.aero>

AIR ACCIDENTS: <http://www.planecrashinfo.com/database.htm>

SAFETY MAGAZINE: <http://www.flightsafety.org>

IATA: <http://www.iata.org>

INTERNATIONAL CIVIL AVIATION: <http://www.icao.int>

GENERAL DIRECTORATE OF CIVIL AVIATION: <http://www.mfom.es>

AIS: <http://ais.aena.es>

EUROCONTROL: <http://www.eurocontrol.int>

EASA: <http://www.easa.eu.int>

FAA: <http://www.faa.gov>

EUR LEX: <http://eur-lex.europa.eu>

## Software

## Groups and Languages

Please note that this information is provisional until 30 November 2025. You can check it through this [link](#). To consult the language you will need to enter the CODE of the subject.

Name	Group	Language	Semester	Turn
(PAUL) Classroom practices	11	Catalan	first semester	afternoon
(PAUL) Classroom practices	12	Catalan	first semester	afternoon
(SEM) Seminars	21	Catalan	first semester	afternoon
(SEM) Seminars	22	Catalan	first semester	afternoon
(SEM) Seminars	23	Catalan	first semester	afternoon
(TE) Theory	11	Catalan	first semester	afternoon